

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS ✓
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

-43 A T A C T G G C T C A A C C T C G G A G C T C A C A C T C A G G C T G G C G G G C C

-26	Met	Gly	Arg	Arg	Val	Pro	Ala	Leu	Arg	Gln	Leu	Val	Leu	Ala	Val	Leu	Leu	Leu	Lys	Pro	Ser	Gln	Leu	Gln
1	ATG	GGG	CGG	CGA	GTC	CCA	GCT	CTG	AGA	CAG	CTG	GTG	CTG	CTG	GCA	GTG	CTG	CTG	AAG	CCT	TCA	CAG	CTG	CAG
-1	Ser	Arg	Glu	Leu	Ser	Gly	Ser	Arg	Cys	Pro	Glu	Pro	Cys	Asp	Cys	Ala	Pro	Asp	Gly	Ala	Leu	Arg	Cys	Pro
76	TCC	CGA	GAG	CTG	TCA	GGG	TCG	TCG	TGC	TGC	GAG	CCC	GAG	CCC	TGC	TGC	GCA	CCG	GAT	GGC	CTG	CGC	TGT	
25	Pro	Arg	Ala	Gly	Leu	Ala	Arg	Leu	Ser	Leu	Thr	Tyr	Leu	Pro	Val	Lys	Val	Ile	Pro	Ser	Gln	Ala	Phe	
151	CCT	CGA	GCC	GCC	CTC	GCC	AGA	CTA	TCT	CTC	ACC	TAT	CTC	CCT	GTC	AAA	GTA	ATT	CCA	TCA	CAA	GCT	TTC	
50	Leu	Asn	Glu	Val	Val	Lys	Ile	Glu	Ile	Ser	Gln	Ser	Asp	Ser	Leu	Glu	Arg	Ile	Glu	Ala	Asn	Ala	Phe	
226	CTT	AAT	GAG	GTC	GTA	AAA	ATT	GAA	ATC	TCT	CAG	AGT	GAT	TCC	CTG	GAA	AGG	ATA	GAA	GCT	AAT	GCC	TTT	
75	Leu	Leu	Asn	Leu	Ser	Glu	Leu	Leu	Ile	Gln	Asn	Thr	Lys	Asn	Leu	Tyr	Ile	Glu	Pro	Gly	Ala	Phe	Thr	
301	CTC	CTC	AAT	TTG	TCT	GAA	CTA	CTG	ATC	CAG	AAC	ACC	AAA	AAC	CTG	CTA	TAC	ATT	GAA	CCT	GGT	GCT	TTT	
100	Leu	Pro	Arg	Leu	Lys	Tyr	Leu	Ser	Ile	Cys	Asn	Thr	Gly	Ile	Arg	Thr	Leu	Pro	Asp	Val	Thr	Lys	Ile	
376	CTC	CCT	CGG	TTA	AAA	TAC	CTG	AGC	ATC	TGT	AAC	ACA	GGC	ATC	CGA	ACC	CTT	CCA	GAT	GTT	ACG	AAG	ATC	
125	Ser	Glu	Phe	Asn	Phe	Ile	Leu	Glu	Ile	Cys	Asp	Asn	Leu	His	Ile	Thr	Thr	Ile	Pro	Gly	Asn	Ala	Phe	
451	TCT	GAA	TTT	AAT	TTC	ATT	CTG	GAA	ATC	TGT	GAT	AAC	TTA	CAC	ATA	ACC	ACC	ATA	CCC	GGG	AAT	GCT	TTC	
150	Met	Asn	Asn	Glu	Ser	Val	Thr	Leu	Lys	Leu	Tyr	Gly	Asn	Gly	Phe	Glu	Val	Gln	Ser	His	Ala	Phe	Asn	
526	ATG	AAT	AAC	GAG	TCT	GTC	ACA	CTA	AAA	CTG	TAT	GGA	AAT	GGA	TTT	GAA	GAA	GTA	CAA	AGC	CAT	GCA	TTC	
175	Thr	Thr	Leu	Ile	Ser	Leu	Glu	Leu	Lys	Glu	Asn	Ile	Tyr	Leu	Glu	Lys	Met	His	Ser	Gly	Ala	Phe	Gln	
601	ACG	ACT	CTA	ATC	TCG	CTG	GAG	CTA	AAA	GAA	AAC	ATC	TAC	CTG	GAG	AAG	ATG	CAC	AGT	GGA	GCC	TTC	CAG	
200	Thr	Gly	Pro	Ser	Ile	Leu	Asp	Ile	Ser	Ser	Thr	Lys	Leu	Gln	Ala	Leu	Pro	Ser	His	Gly	Leu	Glu	Ser	
676	ACG	GGG	CCC	AGC	ATC	CTG	GAT	ATT	TCT	TCC	ACC	AAA	TTG	CAG	GCC	CTG	CCG	AGC	CAC	GGG	CTG	GAG	TCC	
225	Thr	Leu	Ile	Ala	Leu	Ser	Ser	Tyr	Ser	Leu	Lys	Thr	Leu	Pro	Ser	Lys	Glu	Lys	Phe	Thr	Ser	Leu	Val	
751	ACG	CTC	ATC	GCC	CTG	TCT	TCC	TAC	TCA	CTG	AAA	ACA	CTG	CCC	TCC	AAA	GAA	AAA	TTT	ACG	AGC	CTC	CTG	
250	Thr	Leu	Thr	Tyr	Pro	Ser	His	Cys	Cys	Ala	Phe	Arg	Asn	Leu	Pro	Lys	Lys	Glu	Gln	Asn	Phe	Ser	Phe	
826	ACG	CTG	ACC	TAC	CCC	AGC	CAC	TGC	TGC	GCC	TTC	AGG	AAT	TTG	CCG	AAG	AAA	GAA	CAG	AAT	TTT	TCA	TTT	
275	phe	Glu	Asn	phe	Ser	Lys	Gln	Cys	Glu	Ser	Thr	Val	Arg	Lys	Ala	Asp	Asn	Glu	Thr	Leu	Tyr	Ser	Ala	
901	TTT	GAA	AAC	TTT	TCC	AAA	CAA	TGC	GAA	AGC	ACA	GTT	AGA											

Fig. 1B.

300 Glu Glu Asn Glu Leu Ser Gly Trp Asp Tyr Asp Tyr Gly Phe Cys Ser Pro Lys Thr Leu Gln Cys Ala Pro Glu  
976 GAG GAG AAT GAA CTC AGT AGT GGC TGG GAT TAT GAT TAT GGC TTC TGT TCA CCC AAG ACA CTC CAA TGT GCT CCA GAA

325 Pro Asp Ala Phe Asn Pro Cys Glu Asp Ile Met Gly Tyr Ala Phe Leu Arg Val Leu Ile Trp Leu Ile Asn Ile  
1051 CCA GAT GCT TTC AAC CCC TGT GAA GAT ATT ATG GGC TAT GCC TTC CTT AGG GTC CTG ATT TGG CTG ATT AAT ATA

350 Leu Ala Ile Phe Gly Asn Leu Thr Val Leu Phe Val Leu Leu Thr Ser Arg Tyr Lys Leu Thr Val Pro Arg Phe  
1126 CTA GCC ATC TTT GGC AAC CTG ACA GTC CTC TTT GTT CTC CTG ACC AGT CGT TAT AAA CTG ACA GTG CCC CGC TTC

375 Leu Met Cys Asn Leu Ser Phe Ala Asp Phe Cys Met Gly Leu Tyr Leu Leu Ile Ala Ser Val Asp Ser Gln  
1201 CTC ATG TGT AAT CTC TCC TTT GCA GAC TTT TGC ATG GGC CTC TAC CTG CTC ATT GCC TCC GTG GAC TCC CAA

400 Thr Lys Gly Gln Tyr Tyr Asn His Ala Ile Asp Trp Gln Thr Gly Ser Gly Cys Gly Ala Ala Gly Phe Phe Thr  
1276 ACA AAA GGC CAG TAC TAT AAC CAC GCC ATA GAC TGG CAG ACA GGG AGT GGC TGC GGT GCA GCT GGC TTC TTT ACT

425 Val Phe Ala Ser Glu Leu Ser Val Tyr Thr Leu Thr Val Ile Thr Leu Glu Arg Trp His Thr Ile Thr Tyr Ala  
1351 GTG TTT GCC AGT GAA CTC TCT GTC TAC ACC CTG ACG GTT ATC ACC CTG GAA AGG TGG CAC ACC ATC ACC TAT GCT

450 Val Gln Leu Asp Gln Lys Leu Arg Leu Arg His Ala Ile Pro Ile Met Leu Gly Gly Trp Leu Phe Ser Thr Leu  
1426 GTA CAG CTA GAC CAA AAG CTA AGA CTG AGA CTG AGG CAT GCC ATC CCA ATT ATG CTC GGA GGA TGG CTC TTT TCT ACG CTG

475 Ile Ala Thr Met Pro Leu Val Gly Ile Ser Asn Tyr Met Lys Val Ser Ile Cys Leu Pro Met Asp Val Glu Ser  
1501 ATC GCC ACG ATG ATG CCC CTT GTG GGT ATC AGC AAT TAC ATG AAG GTC AGC ATC TGC CTC CCC ATG GAT GTG GAA TCC

500 Thr Leu Ser Gln Val Tyr Ile Leu Ser Ile Leu Asn Val Val Ala Phe Val Val Ile Cys Ala Cys Tyr  
1576 ACT CTG TCC CAA GTC TAC ATA TTA TCC ATC CTC AAC GTG GTG GCC TTC GTC GTC ATC TGT GCT TGC TAC

525 Ile Arg Ile Tyr Phe Ala Val Gln Asn Pro Glu Leu Thr Thr Ala Pro Asn Lys Asp Thr Lys Ile Ala Lys Lys Met  
1651 ATT AGG ATC TAC TTT GCA GTT CAA AAT CCA GAG CTG ACA GCT CCT AAC AAG GAC ACA AAA ATT GCT AAG AAG ATG

Fig. 1C.

550 Ala Ile Leu Ile Phe Thr Asp Phe Thr Cys Met Ala Pro Ile Ser Phe Phe Ala Ile Ser Ala Ala Phe Lys Val  
 1726 GCC ATC CTC ATC TTC ACA GAC TTC ACG TGC ATG GCG CCC ATC TCT TTC TTT GCC ATC TCG GCT GCC TTC AAA GTG

575 Pro Leu Ile Thr Val Thr Asn Ser Lys Ile Leu Leu Val Leu Phe Phe Tyr Pro Val Asn Ser Cys Ala Asn Pro Phe  
 1801 CCC CTT ATC ACT GTC ACC AAC TCG AAA ATC TTA CTG GTC CTT TTT TAT CCT GTC AAT TCT TGT GCC AAT CCA TTT

600 Leu Tyr Ala Ile Phe Thr Lys Ala Phe Gln Arg Asp Phe Leu Leu Leu Ser Arg Phe Gly Cys Cys Lys Arg  
 1876 CTG TAT GCG ATC TTC ACG AAG GCG TTT CAG AGA GAT TTC CTT CTG CTG AGC CGA TTC GGC TGC TGT AAA CGC

625 Arg Ala Glu Leu Tyr Arg Arg Lys Glu Phe Ser Ala Tyr Thr Ser Asn Cys Lys Asn Gly Phe Pro Gly Ala Ser  
 1951 CGG GCG GAG CTT TAC AGA AGG AAG GAA TTT TCT GCA TAT ACT TCC AAC TGC AAA AAT GGC TTC CCA GGA GCA AGT

650 Lys Pro Ser Gln Ala Thr Leu Lys Leu Ser Thr Val His Cys Gln Pro Ile Pro Arg Ala Leu Thr His  
 2026 AAG CCG TCC CAG GCT ACC CTG AAG TTG TCC ACA GTG CAC TGT CAA CAG CCC ATA CCA CCG AGA GCG TTA ACT CAC

2101 TAGCATTACAAAATTGTGCCTAAATATGTTTTTAAAGTGTTTTAGAAAATATTTATCCTTAGGCACCTTCAGGAGAAATGTACCTGCTCAGAGGAC  
 2201 GGCTATAACACTTGGTCACATAAGTTTCAGGAAGTTTAGAAATTTTTATAGTAATTTAGGCATAATAATTTTTTTGTAATCTAATACTAAGGAATC  
 2301 TAAGTTGTCAATTTTCAGCTCTCGACATTTTTCATTTTCAATCTTGTGATTACATTTGTAATCTCCAAATATATTTACTTCATAGCAGATTGAAAATTTAA  
 2401 ACTGGTCTTTGCTCAGATAGTTTGATAAATATATTCAAGAGATGCACTGTGAGTGTGACTGTGAGTGTGATGTTAAATAGAGTTTCTTAGCCAT  
 2501 ATTCCAAGTGTCTCACATGTACACTAGGAGGCACAGATGCAAACTGTTTACATCAGTGAATCTATTAGCCAGCTCTATTCTAGAGACTTCTATTCCC  
 2601 ATTGACACTCTGCTTAATCTTCCATCTGAAGGCACATGCTGCATATTTGTTGGCTTACAGATCAGTACCTCATGGCCAGGAGCCCATCTCAGCCCA  
 2701 TCTTGTCTCTCTATCTCAGGATCTTGGAAATGTACACAGCAAGCATGCCATGCCAGTTAACTCCCTAAATCTACACAGGAAAATATTTCTACCCAC  
 2801 CTTAGCATATTGTTTTCGATGATTACATGCTTCTGTATTTTGCCCTCCTCTAGTATC

1hrk	<u>KELSGSRKPEPNDFAPDGALXXPGP</u>	1hrf	(M) X (S) <u>GAFAQATGPSILD</u> PV	(E)	(I)
1hrr	(M) XXESVTLKLYGNCFEEVQ				
1hr28	(K) NLLYIEPGSF	1hrc	(M) (D) YA (G) LXVLI (G) LINILDXF	(G) (F)	(F)
				(A)	
1hr26	(K) XYGNXFEXVQ			(N)	

Fig. 2A.

	TM-1																									TM-2																									
LH/CGR	339	F	L	R	V	L	I	W	L	I	N	I	L	A	I	F	G	N	L	T	V	L	F	V	L	L	T	S	-	-	R	Y	K	L	-	T	V	P	R	F	L	M	C	N	L	S	F	A	D	F	384
RHO	36	Q	F	S	M	L	A	A	Y	M	F	L	L	I	M	L	G	F	P	I	N	F	L	T	L	Y	V	T	V	Q	H	K	K	L	R	T	P	L	N	Y	I	L	L	N	L	A	V	A	D	L	84
SKR	35	L	W	T	A	A	Y	L	A	L	V	L	V	A	V	M	G	N	A	T	V	I	W	I	L	A	-	-	-	H	Q	R	M	R	T	V	T	N	Y	F	I	V	N	L	A	L	A	D	L	80	
B-2AR	35	G	M	G	I	V	M	S	L	I	V	L	A	I	V	F	G	N	V	L	V	I	T	A	I	A	K	-	-	-	F	E	R	L	Q	T	V	T	N	Y	F	I	T	S	L	A	C	A	D	L	80
5HT-2R	53	W	S	A	L	L	T	T	V	V	I	L	T	I	A	G	N	I	L	V	I	M	A	V	S	L	-	-	-	E	K	K	L	Q	N	A	T	N	Y	F	L	M	S	L	A	I	A	D	M	99	

	TM-3																																																			
LH/CGR	C	M	G	L	Y	L	L	I	A	S	V	D	S	Q	T	K	G	Q	Y	N	H	A	I	D	W	Q	T	G	-	S	G	C	G	A	A	G	F	F	T	V	F	A	S	E	L	S	V	Y	433			
RHO	F	M	V	F	G	G	F	T	T	L	Y	T	S	L	-	-	-	-	-	-	-	-	-	H	G	Y	F	V	F	G	P	T	G	C	N	L	E	G	F	F	A	T	L	G	G	E	I	A	L	W	126	
SKR	C	M	A	A	F	N	A	A	F	N	F	V	Y	A	S	-	-	-	-	-	-	-	-	H	N	I	W	Y	F	G	R	A	F	C	Y	F	Q	N	L	F	P	I	T	A	M	F	V	S	I	Y	122	
B-2AR	V	M	G	L	A	V	V	P	F	G	A	A	H	I	L	-	-	-	-	-	-	-	-	M	K	M	W	T	F	G	N	F	W	C	E	F	W	T	S	I	D	V	L	C	V	T	A	S	I	E	122	
5HT-2R	L	L	G	F	L	V	M	P	V	S	M	L	T	I	L	-	-	-	-	-	-	-	-	Y	G	Y	R	W	P	L	P	S	K	L	C	A	I	W	I	Y	L	D	V	L	F	S	T	A	S	I	M	142

	TM-4																																																		
LH/CGR	T	L	T	V	I	T	L	E	R	W	H	T	I	T	Y	A	V	Q	L	D	Q	K	L	R	L	R	H	A	I	P	I	M	L	G	G	W	L	F	S	T	L	I	A	T	M	P	L	V	G	I	483
RHO	S	L	V	V	L	A	I	E	R	Y	V	V	V	C	K	P	M	S	N	F	R	F	-	G	E	N	H	A	I	M	G	V	A	F	T	W	V	M	A	L	A	C	A	A	P	P	L	V	G	W	175
SKR	S	M	T	A	I	A	A	D	R	Y	M	A	I	V	H	P	F	Q	P	R	L	S	A	P	G	T	R	A	-	-	V	I	A	G	I	W	L	V	A	L	A	L	A	F	-	P	Q	C	F	Y	169
B-2AR	T	L	C	V	I	A	V	D	R	Y	F	A	I	T	S	P	F	K	Y	Q	S	L	L	T	K	N	K	A	R	V	I	I	L	M	V	W	I	V	S	G	L	T	S	F	L	P	I	Q	M	H	172
5HT-2R	H	L	C	A	I	S	L	D	R	Y	V	A	I	Q	N	P	I	H	H	S	R	F	N	S	R	T	K	A	F	L	K	I	I	A	V	W	T	I	S	V	G	I	S	M	-	P	I	P	V	F	191

Fig. 2B.

TM-5

LH/CGR	S	N	Y	-	-	-	M	K	V	S	I	C	L	P	M	D	V	E	S	T	L	-	-	-	S	Q	V	Y	I	L	S	I	L	I	L	N	V	V	A	F	-	V	V	I	C	A	C	Y	I	R	526	
RHO	S	R	Y	I	P	E	G	M	Q	C	S	C	G	I	D	Y	Y	T	P	H	E	E	T	N	N	E	S	F	V	I	Y	M	F	V	V	H	F	I	I	P	L	I	V	I	F	F	C	Y	G	Q	225	
SKR	S	T	I	T	D	E	G	A	T	K	C	V	V	A	W	P	E	D	S	G	G	K	M	L	L	Y	H	L	I	V	I	A	L	I	Y	F	L	P	L	V	V	M	F	V	A	Y	S	V	219			
B-2AR	W	Y	R	A	T	H	Q	E	A	I	N	C	Y	A	N	E	T	C	C	D	F	-	F	T	N	Q	A	Y	A	I	A	S	S	I	V	S	F	Y	V	P	L	V	I	M	V	F	V	Y	S	R	221	
5HT-2R	G	L	Q	D	D	S	K	V	F	K	E	G	S	C	L	L	A	D	-	-	-	-	-	-	-	-	D	N	F	V	L	I	G	S	F	V	A	F	F	I	P	L	T	I	M	V	I	T	Y	F	L	234

TM-6

LH/CGR	I	Y	F	A	V	Q	N	P	E	L	T	A	P	N	K	D	T	K	I	A	K	K	M	A	I	L	I	F	T	D	F	T	-	C	M	A	P	I	S	F	F	A	I	S	A	A	F	K	V	P	575
RHO	L	V	F	T	V	K	E	A	A	A	(8)	Q	K	A	E	K	E	V	T	R	M	V	I	I	M	V	I	A	F	L	I	C	W	L	P	Y	A	G	V	A	F	Y	I	F	T	H	Q	G	280		
SKR	I	G	L	T	L	W	R	R	S	V	(12)	L	Q	A	K	K	F	V	K	T	M	V	L	V	V	T	F	A	I	C	W	L	P	Y	H	L	Y	F	I	L	G	T	F	Q	E	D	278				
B-2AR	V	F	Q	E	A	K	R	Q	L	Q	(33)	C	L	K	E	H	K	A	L	K	T	L	G	I	I	M	G	T	F	T	L	C	W	L	P	F	F	I	V	N	I	V	H	V	I	Q	D	N	301		
5HT-2R	T	I	K	S	L	Q	K	E	A	T	(48)	I	S	N	E	Q	K	A	C	K	V	L	G	I	V	F	F	L	F	V	V	M	W	C	P	F	F	I	T	N	I	M	A	V	I	C	K	E	329		

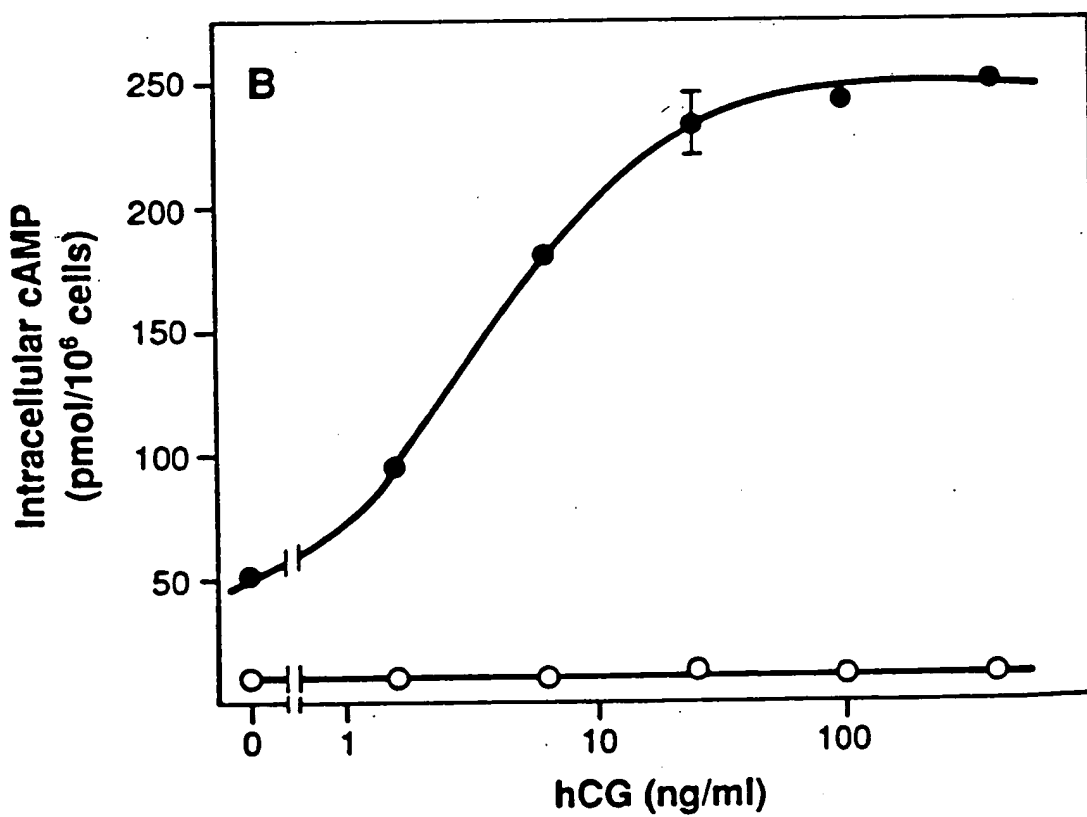
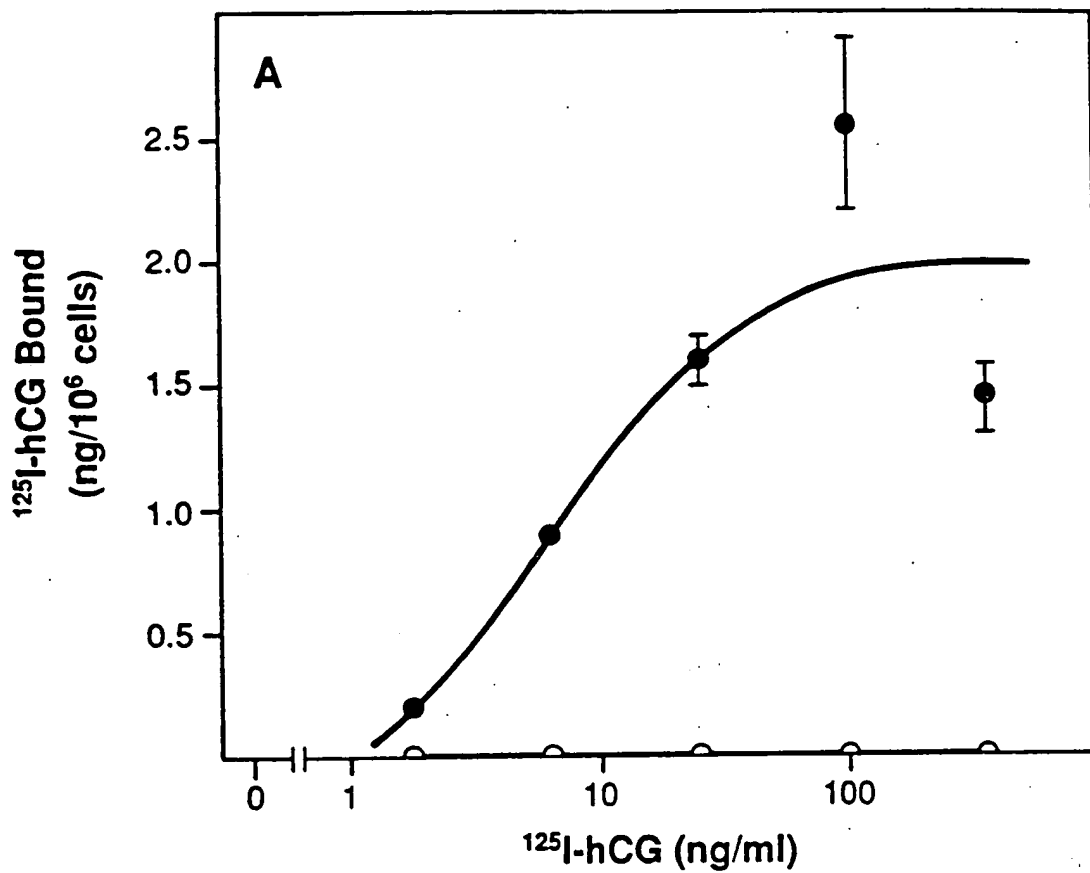
TM-7

LH/CGR	L	I	T	V	T	N	S	-	-	-	K	I	L	L	V	L	F	Y	P	V	N	S	C	A	N	P	F	L	Y	A	I	F	T	K	A	F	Q	R	D	F	L	L	L	S	R	F	G	C	621/674	
RHO	S	D	F	G	P	I	F	-	-	-	M	T	I	P	A	F	F	A	K	T	S	A	V	Y	N	P	V	I	Y	I	M	M	N	K	Q	F	R	N	C	M	V	T	T	L	C	G	K	N	326/348	
SKR	I	Y	C	H	K	F	I	Q	Q	-	Y	L	A	L	F	W	L	A	M	S	S	T	M	Y	N	P	I	I	Y	C	C	L	N	H	R	F	R	S	G	F	R	L	A	F	R	C	P	W	327/384	
B-2AR	L	I	R	K	E	V	-	-	-	Y	I	L	L	N	W	I	G	Y	V	N	S	G	F	N	P	L	I	Y	-	C	R	S	P	D	F	R	I	A	F	Q	E	L	L	C	L	R	R	S	345/413	
5HT-2R	S	C	N	E	N	V	I	G	A	L	L	N	V	F	V	W	I	G	Y	L	S	S	A	V	N	P	L	V	Y	T	L	F	N	K	T	Y	R	S	A	F	S	R	Y	I	Q	C	Q	Y	K	378/449

B	LRG	Toll	GPIB	ACY
L x L P x x - - L L x x L x x L x - x L D L S x N x	L x x L P x x - - L F x H x x N L x - x L x L x x N x	L T T L P x G - - L L x x L P x L x - x L x L S x N x	a x x a P x x - - - a x x L x x L x - x L x L x x N x	

7/12

Fig. 4.





8/12

*Fig. 5.*

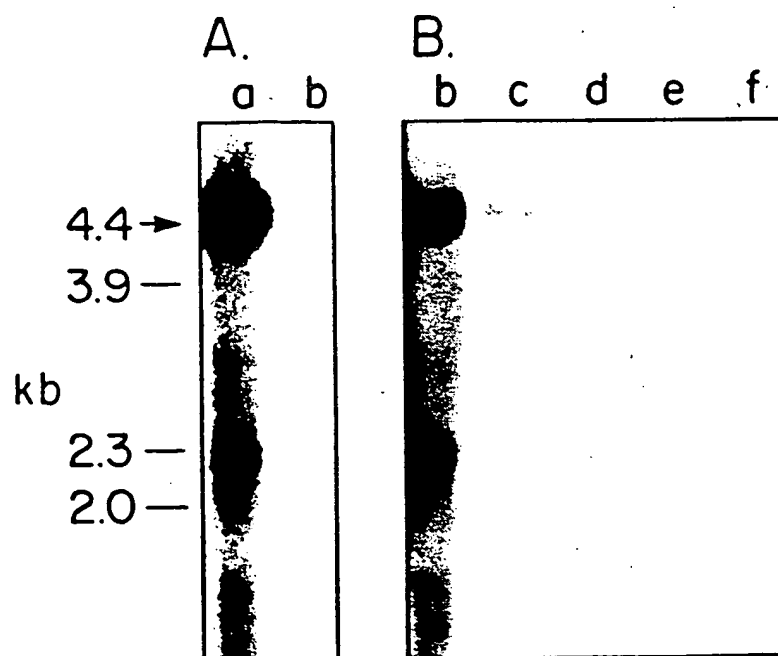


Fig. 6A.

AGGAGCCTGG GGAATCTGTG GAAGTTTTTCG CGCTGATGCA GAAAGAAAGT CGGTGANTGG

-71	ATAAATAAGG	ATG GCC TTG CTC CTG GTC TCC TTG CTG GCA TTC TTG GGC ACG GGA TCT GGA	
-10		Met Ala Leu Leu Val Ser Leu Leu Ala Phe Leu Gly Thr Gly Ser Gly	
-17			
51	TGT CAT CAC TGG CTG TGT CAT TGC TCT AAT AGG GTC TTT CTC TGC CAA GAC AGC MAG GTG		
1	Cys His His Trp Leu Cys His Cys Ser Asn Arg Val Phe Leu Cys Gln Asp Ser Lys Val		
111	ACA GAG ATT CCG ACC GAC CTC CCC CGG AAC GCC ATT GAA CTG AGG TTT GTG CTC ACC ACC MAG		
21	Thr Glu Ile Pro Thr Asp Leu Pro Arg Asn Ala Ile Glu Leu Arg Phe Val Leu Thr Lys		
171	CTT CGA GTC ATC CCG AAA GGA TCA TTT GCT GGA TTT GGA GAC CTG GAG AAA ATA GAG ATC		
41	Leu Arg Val Ile Pro Lys Gly Ser Phe Ala Gly Phe Gly Asp Leu Glu Lys Ile Glu Ile		
231	TCT CAG AAT GAT GTC TTG GAA GTA ATA GAG GCA GAT GTG TTC AAC CTA CCC AAG TTG		
61	Ser Gln Asn Asp Val Leu Glu Val Ile Glu Ala Asp Val Phe Ser Asn Leu Pro Lys Leu		
291	CAT GAA ATT AGG ATT GAA AAG GCC AAC AAT CTT CTG TAC ATC AAC CCG GAG GCC TTC CAG		
81	His Glu Ile Arg Ile Glu Lys Ala Asn Asn Leu Leu Tyr Ile Asn Pro Glu Ala Phe Gln		
351	AAT CTC CCC AGT CTC AGA TAT CTG TTA ATA TCC AAC ACA GGC ATT AAG CAC TTG CCA GCT		
101	Asn Leu Pro Ser Leu Arg Tyr Leu Leu Ile Ser Asn Thr Gly Ile Lys His Leu Pro Ala		
411	GTT CAC AAG ATC CAG TCT CTC CAA AAG GTT CTA CTA GAC ATT CAA GAT AAC ATA AAC ATC		
121	Val His Lys Ile Gln Ser Leu Gln Lys Val Leu Leu Asp Ile Gln Asp Asn Ile Asn Ile		
471	CAC ATC GTT GCC AGG AAC TCC TTC ATG GGA CTG AGT TTT GAA AGT GTG ATT TTA TGG CTG		
141	His Ile Val Ala Arg Asn Ser Phe Met Gly Leu Ser Phe Glu Ser Val Ile Leu Trp Leu		
531	AGT AAG AAT GGG ATT GAA GAA ATA CAC AAC TGT GCA TTC AAC GGA ACT CAG CTA GAT GAA		
161	Ser Lys Asn Gly Ile Glu Glu Ile His Asn Cys Ala Phe Asn Gly Thr Gln Leu Asp Glu		
591	CTG AAT CTA AGC GAT AAC AAT AAT TTG GAA GAA TTG CCT AAT GAC GTT TTC CAG GGA GCC		
181	Leu Asn Leu Ser Asp Asn Asn Asn Leu Glu Glu Leu Pro Asn Asp Val Phe Gln Gly Ala		
651	TCT GGG CCA GTC ATT TTA GAT ATC TCA AGG ACA AAG GTC CAT TCC TTA CCA AAC CAT GGC		
201	Ser Gly Pro Val Ile Leu Asp Ile Ser Arg Thr Lys Val His Ser Leu Pro Asn His Gly		
711	TTA GAA AAT CTG AAG AAG CTG AGG GCC AGG TCA ACA TAC CGC TTG AAA AAG CTC CCT AAT		
221	Leu Glu Asn Leu Lys Lys Leu Arg Ala Arg Ser Thr Tyr Arg Leu Lys Leu Pro Asn		
771	CTG GAC AAG TTT GTC ACC CTC ATG GAG GCC AGC CTC ACC TAC CCC AGC CAC TGC TGT GCT		
241	Leu Asp Lys Phe Val Thr Leu Met Glu Ala Ser Leu Thr Tyr Pro Ser His Cys Cys Ala		
831	TTT GCA AAC TTG AAG CCG CAA ATC TCT GAA CTT CAT CCA ATT TGC AAC AAG TCT ATT TTA		
261	Phe Ala Asn Leu Lys Arg Gln Ile Ser Glu Leu His Pro Ile Cys Asn Lys Ser Ile Leu		
891	AGG CAA GAT ATT GAT GAT ATG ACT CAA ATT GGG GAT CAG AGA GTC TCT CTG ATA GAT GAT		
281	Arg Gln Asp Ile Asp Asp Met Thr Gln Ile Gly Asp Gln Arg Val Ser Leu Ile Asp Asp		
951	GAA CCC AGT TAT GGA AAA GGA TCT GAC ATG ATG TAC AAT GAA TTT GAT TAT GAC TTA TGT		
301	Glu Pro Ser Tyr Gly Lys Gly Ser Asp Met Tyr Asn Glu Phe Asp Tyr Asp Leu Cys		
1011	AAT GAA GTT GTT GAT GTG ACC TGC TCA CCA AAG CCA GAT GCA TTT AAT CCA TGT GAA GAT		
321	Asn Glu Val Val Asp Val Thr Cys Ser Pro Lys Pro Asp Ala Phe Asn Pro Cys Glu Asp		

Fig. 6B.

1071	ATC	ATG	GGG	TAC	AAC	ATC	CTC	AGG	GTC	TTG	ATA	TGG	TTT	ATT	AGC	ATC	CTG	GCC	ATT	ACT
341	Ile	Met	Gly	Tyr	Asn	Ile	Leu	Arg	Val	Leu	Ile	Trp	Phe	Ile	Ser	Ile	Leu	Ala	Ile	Thr
1131	GGG	AAG	ACC	ACA	GTG	CTG	GTG	GTC	CTG	ACC	ACA	AGC	CAA	TAC	AAA	CTA	ACT	GTG	CCC	CGG
361	Gly	Asn	Thr	Thr	Val	Leu	Val	Val	Leu	Thr	Thr	Ser	Gln	Tyr	Lys	Leu	Thr	Val	Pro	Arg
1191	TTT	CTT	ATG	TGT	AAC	CTC	GCC	TTC	GCT	GAT	CTC	TGC	ATA	GGC	ATC	TAC	TTG	CTA	CTT	ATA
381	Phe	Leu	Met	Cys	Asn	Leu	Ala	Phe	Ala	Asp	Leu	Cys	Ile	Gly	Ile	Tyr	Leu	Leu	Ile	
1251	GCA	TCA	GTT	GAC	ATC	CAT	ACC	AAG	AGC	CAG	TAC	CAC	AAC	TAT	GCC	ATT	GAC	TGG	CAA	ACA
401	Ala	Ser	Val	Asp	Ile	His	Thr	Lys	Ser	Gln	Tyr	His	Asn	Tyr	Ala	Ile	Asp	Trp	Gln	Thr
1311	GGA	GCA	GGC	TGT	GAT	GCT	GCT	GGC	TTT	TTC	ACT	GTC	TTT	GCC	AGT	GAA	CTG	TCA	GTC	TAC
421	Gly	Ala	Gly	Cys	Asp	Ala	Ala	Gly	Ala	Phe	Phe	Thr	Val	Phe	Ala	Ser	Glu	Leu	Ser	Tyr
1371	ACA	TTG	ACA	GCC	ATC	ACC	CTA	GAA	AGA	TGG	CAT	ACC	ATC	ACA	CAT	GCT	ATG	CAA	CTG	GAA
441	Thr	Leu	Thr	Ala	Ile	Thr	Leu	Glu	Arg	Trp	His	Thr	Ile	Thr	His	Ala	Met	Gln	Leu	Glu
1431	TGC	AAG	GTG	CAG	CTC	CGG	CAT	GCT	GCC	AGC	GTC	ATG	GTA	TTG	GGC	TGG	ACT	TTT	GCC	TTC
461	Cys	Lys	Val	Gln	Leu	Arg	His	Ala	Ala	Ser	Val	Met	Val	Leu	Gly	Trp	Thr	Phe	Ala	Phe
1491	GCA	GCT	GCT	CTC	TTC	CCC	ATC	TTT	GGC	ATC	AGT	AGC	TAC	ATG	AAA	GTG	AGC	ATC	TGC	CTG
481	Ala	Ala	Ala	Leu	Phe	Pro	Ile	Phe	Gly	Ile	Ser	Ser	Tyr	Met	Lys	Val	Ser	Ile	Cys	Leu
1551	CCC	ATG	GAT	ATC	GAC	AGC	CCT	TTG	TCA	CAG	CTG	TAT	GTT	ATG	GCC	CTC	CTT	GTC	CTC	AAT
501	Pro	Met	Asp	Ile	Asp	Ser	Pro	Leu	Ser	Gln	Leu	Tyr	Val	Met	Ala	Leu	Leu	Val	Leu	Asn
1611	GTC	CTG	GCC	TTT	GTG	GTC	ATC	TGT	GGC	TGC	TAT	ACC	CAC	ATC	TAC	CTC	ACA	GTG	AGG	AAT
521	Val	Leu	Ala	Phe	Val	Val	Ile	Cys	Gly	Cys	Tyr	Thr	His	Ile	Tyr	Leu	Thr	Val	Arg	Asn
1671	CCT	ACC	ATT	GTG	TCC	TCA	TCA	AGC	GAC	ACC	Thr	Lys	Ile	Ala	Lys	Arg	Met	Ala	Thr	Leu
541	Pro	Thr	Ile	Val	Ser	Ser	Ser	Ser	Ser	Asp	Thr	Lys	Ile	Ala	Lys	Arg	Met	Ala	Thr	Leu
1731	TTC	ACA	GAC	TTT	CTC	TGC	ATG	GCC	CCC	ATC	ATT	TCA	TTT	GCC	ATT	TCT	GCC	TCC	CTC	AAG
561	Phe	Thr	Asp	Phe	Leu	Cys	Met	Ala	Pro	Ile	Ser	Phe	Phe	Ala	Ile	Ser	Ala	Ser	Leu	Lys
1791	GTG	CCG	CTC	ATC	ACT	GTG	TCC	AAG	GCC	AAG	ATT	CTC	CTA	GTT	CTG	TTT	TAC	CCC	ATC	AAT
581	Val	Pro	Leu	Ile	Thr	Val	Val	Ser	Lys	Ala	Lys	Ile	Leu	Leu	Val	Phe	Thr	Pro	Ile	Asn
1851	TCT	TGT	GCC	AAT	CCT	TTC	CTC	TAC	GCC	ATT	TTC	ACC	AAG	AAC	TTC	CGC	AGG	GAC	TTC	TTC
601	Ser	Cys	Ala	Asn	Pro	Phe	Leu	Tyr	Ala	Ile	Phe	Thr	Lys	Asn	Phe	Arg	Arg	Asp	Phe	Phe
1911	ATC	CTG	CTG	AGC	AAG	TTT	GGC	TGT	TAT	GAA	ATG	CAA	GCC	CAG	ATT	TAC	AGG	ACA	GAA	ACC
621	Ile	Leu	Leu	Ser	Lys	Phe	Gly	Cys	Tyr	Glu	Met	Gln	Ala	Gln	Ile	Tyr	Arg	Thr	Glu	Thr
1971	TCA	TCC	GCT	ACC	CAC	AAC	TTC	CAT	GCC	CGA	AAG	AGC	CAC	TGC	TCC	TCA	GCT	CCC	AGA	GTC
641	Ser	Ser	Ala	Thr	His	Asn	Phe	His	Ala	Arg	Lys	Ser	His	Cys	Ser	Ser	Ala	Pro	Arg	Val
2031	ACC	AAT	AGT	TAC	GTG	CTT	GTC	CCT	CTT	AAT	CAT	TCA	TCC	CAG	AAC	TAAAATCA	TGTGAAAA			
661	Thr	Asn	Ser	Tyr	Val	Leu	Val	Pro	Leu	Asn	His	Ser	Ser	Gln	Asn					
2094	TG	GATCCTCACC	TTGAAGACA	ATTATGACTC	CTTCTGAAGA	GCAGGCCCATG	GACTAAATGG	CAATCCTACT												
2166	GCACATCTCA	TCTAATTAA	TCTCTCTGGG	TCTCTGCTGG	GCAGACTGAT	CAGGGACCAT	TAATCACCCC													
2236	TTTGCTCCT	CTCACACTTA	AATAATGGTA	ACAGCAATA	AAACAAGCA	AAACCCGACA														

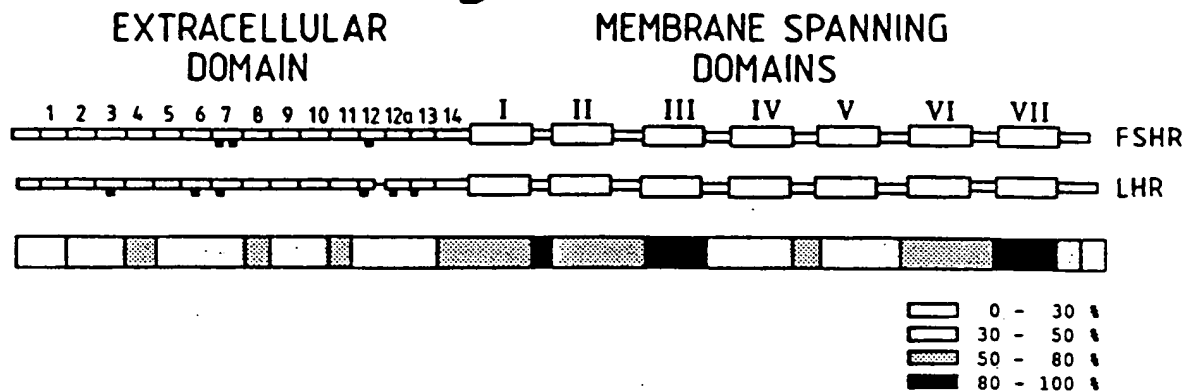
See also 6, 7 (mutual)

← See also 5

10/2

Fig.7.

A)



B)

1 RELSGSR PE.F D APDGA R PGPRAGLAR..... SLTYLFVK  
 1 CHHWLCHCSNRVFL.CQDSKVTETPTDLPRAIELRFVLTQLR  
 41 SQA R LNEVV S S R NA D LN S LL QNTK  
 43 VIPKGSFAGFGDLEKIEISQNDVLELVIEADVFSNLPKLHEIRIEKANLL  
 91 E G T R K S C RT D T S SEFNFI E C LH T  
 91 YINPEAFQNLPSLRILLISNTGIKHLPAVHKIQSLQ.KVLLDIQDNINIH  
 141 TIPG A Q MNN T K YG F VQSH T IS E KE IY K  
 142 IVARNSFMGLSFESVILWLSKNQIEEIHNCANFGTQDELNLSDNNNLEE  
 191 MHSGA T S S LQA S SIQT I L S S T SK  
 192 LPNDVFQGASGPVILDISRTKVHSLPNHGLENLKKLRARSTYRLKKLPNL  
 241 E TS LV T R PKKE.....QNFSSIFENFSKQC  
 242 DKFVTLMESLTYP SHCCAFANLKRQISELHPICNKSILRQIDDMTQIG  
 283 EST RKA N TL SAIFEENELSGWDY GF S.PKTLQ A E  
 292 DQRVSIIDDEPSYG...KGSDDMYNEFDYDLCEVVLVTCSPKPDANPC  
 TM I  
 332 AF LN F L F L R S  
 339 EDIMGYNILRVLIWFISILAITGNTTVLVLTTSQYKLTVPFLMCNLAF  
 TM II TM III  
 382 F M L SQ G Y H S G  
 389 ADLCIGIYLLIASVDIHTKSQYHNYAIDWQTGAGCIAAGFTVFASELS  
 TM IV  
 432 V Y V DQ LR IPI LG L STLI TM LV  
 439 VYTLTAITIERWHTITHAMQLECKVQLRHAASVMVLGWTFFAAAALFPIF  
 TM V  
 482 N VE T V ILSI I V A IR FA  
 489 GISSYMKVSIPLMDIDSPLSLYVMALLVLNVLAFFVICGCYTHIYLTV  
 TM VI  
 532 Q ELTAPNK K I T AF TN  
 539 RNPTIVSSSSDTKIAKFMATLIFTDFLCMAPISSFFAISASLVPLITVSK  
 TM VII  
 582 S V A Q  
 589 AKILLVLFYPINSCANPFLYAIFTNERRDE T  
 631 ..... EF.. YTSNCKNGFPGI I  
 639 ETSSATHNFHARKSHCSSAPRVNTNSYVLVPI .  
 693 PPRALTH rat LH/CG recept r seq #3  
 639 ..... rat FSH r cept r seq #7

12/12

Fig.8.

	(1- 19)	C	H	H	W	L	C	H	C	S	N	R	V	F	L	C	Q	-	-	D	S	K									
1	(20- 40)	V	T	E	I	P	T	D	L	P	R	N	A	I	E	L	R	F	V	-	L	T	K								
2	(41- 66)	L	R	V	I	P	K	G	S	F	A	G	F	G	D	L	E	K	I	E	I	S	Q	N	D	V					
3	(67- 90)	L	E	V	I	E	A	D	V	F	S	N	L	P	K	L	H	E	I	R	I	E	K	A	N	N					
4	(91-114)	L	L	Y	I	N	P	E	A	F	Q	N	L	P	S	L	R	Y	L	L	I	S	-	N	T	G					
5	(115-139)	I	K	H	L	P	A	V	H	K	I	Q	S	L	Q	K	V	L	L	D	I	Q	D	N	I	N					
6	(140-164)	I	H	I	V	A	R	N	S	F	M	G	L	S	F	E	S	V	I	L	W	L	S	K	N	G					
7	(165-188)	I	E	E	I	H	N	C	A	F	G	T	Q	L	D	E	L	-	L	S	D	N	N	N	N						
8	(189-212)	L	E	E	L	P	N	D	V	F	Q	G	A	S	G	P	V	I	L	D	I	S	R	T	K						
9	(213-234)	V	H	S	L	P	N	H	G	L	E	N	L	K	K	L	R	A	R	S	T	Y	R								
10	(235-251)	L	K	K	L	P	N	L	D	K	F	V	T	L	M	E	A	S													
11	(252-283)	L	T	Y	P	S	H	C	A	F	A	N	L	K	R	Q	I	S	E	L	H	P	I	C	K	S	I	L	R	Q	D
12	(284-297)	I	D	D	M	T	Q	I	G	D	Q	R	V	S	L																
13	(298-325)	I	D	D	E	P	S	Y	G	K	G	S	D	M	M	Y	N	E	F	D	Y	D	L	C	N	E	V	V	D		
14	(326-348)	V	T	C	S	P	K	P	D	A	F	N	P	C	E	D	I	M	G	Y	N	I	L	R							

Fig.9.

